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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/665,186	09/17/2003	Andreas Laufer	071308.0472	5562

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EXAMINER

GENTRY, DAVID G

ART UNIT PAPER NUMBER

2114

DATE MAILED: 04/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/665,186

Applicant(s)

LAUFER ET AL.

Examiner

David G. Gentry

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 12-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 12-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-6, 8-10, 12-14, and 16-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ahrens et al. (U.S. Patent No. 6,832,329) in view of Mahoney (U.S. Publication No. 2003/0140268).

As per claims 1 and 8, Ahrens discloses a method for monitoring a driver output, comprising the steps of:

taking error precautions only if a fault state has occurred for a specified period of time (column 1, lines 52-60; Note: Ahrens relies upon five consecutive errors being found. This would take five cycles of checking for the error which would be equivalent to a specified period of time depending on the length of the cycles).

Ahrens fails to disclose influencing the driver output after the fault has been determined.

Mahoney discloses providing for actively influencing the driver output in order to perform fault analysis, and influencing the driver output after a fault state has occurred (paragraph 8; Note: How the fault severity level for the input signal is found is shown in paragraph 31, which is the same method as used for the output signal as shown in paragraph 39. It is understood that by choosing which output driver to use based on the driver severity level is influencing the driver output).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the driver output influencing as taught by Mahoney in the method taught by Ahrens. It would have been obvious because Mahoney allows for the proper output driver to not be used based on its fault severity level (Mahoney: paragraph 8), which would combine with Ahrens method of not generating false error reports (Ahrens: column 1, lines 46-49) to produce a method that would allow the driver to only not be used when there is a true error.

As per claims 2, 9, and 17, Ahrens discloses a method wherein the driver output is checked cyclically for the occurrence of a fault state (column 1, lines 52-60).

As per claims 3, 10, and 18 Ahrens discloses a method wherein the specified period of time is considered to have elapsed if the fault state has occurred at the driver output for a prespecified number of consecutive cycles (column 1, lines 52-60).

As per claims 4, 12, and 19 Ahrens discloses a method wherein it is possible to configure the prespecified number of consecutive cycles (column 1, lines 52-60; the

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number of consecutive cycles is configured to be five).

As per claims 5, 13, and 20, Mahoney discloses a method wherein the fault state at the driver output is represented by a binary value (paragraph 31; Note: Using the fault flags is a way to store the severity level in binary).

As per claims 6, 14, and 21 Mahoney discloses a method wherein the binary value representing the fault state at the binary output is stored (paragraph 31; Note: Using the fault flags is a way to store the severity level in binary).

As per claim 16, Ahrens discloses a method for monitoring a driver output, comprising the steps of:

- performing a fault analysis of the driver (column 1, lines 52-60);

- determining whether an error occurred (column 1, lines 52-60);

- taking error precautions only if a fault state has occurred for a specified period of time (column 1, lines 52-60; Note: Ahrens relies upon five consecutive errors being found. This would take five cycles of checking for the error which would be equivalent to a specified period of time depending on the length of the cycles).

Ahrens fails to disclose influencing the driver output after the fault has been determined.

Mahoney discloses providing for actively influencing the driver output after a fault state has occurred (paragraph 8; Note: How the fault severity level for the input signal is found is shown in paragraph 31, which is the same method as used for the output signal as shown in paragraph 39. It is understood that by choosing which output driver to use based on the driver severity level is influencing the driver output).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the driver output influencing as taught by Mahoney in the method taught by Ahrens. It would have been obvious because Mahoney allows for the proper output driver to not be used based on its fault severity level (Mahoney: paragraph 8), which would combine with Ahrens method of not generating false error reports (Ahrens: column 1, lines 46-49) to produce a method that would allow the driver to only not be used when there is a true error.

Claims 7, 15, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ahrens in view of Mahoney in further view of Fought et al. (U.S. Publication No. 2003/0005374).

Ahrens and Mahoney are relied upon for reasons stated in the previous section.

Ahrens and Mahoney fail to disclose a test pulse sent to the driver input and/or output.

Fought discloses a method wherein the active influencing of the driver output comprises application of a series of test pulses to the driver input and/or the driver output (abstract; paragraph 16, lines 21-46; Note: the signals are performing the functions of the test pulses).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the driver output influencing as taught by Fought in the method taught by Ahrens and Mahoney. It would have been obvious because Fought's

testing system allows for the proper functionality (paragraph 2).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David G. Gentry whose telephone number is (571) 272-2570. The examiner can normally be reached on M-F 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Scott Baderman can be reached on (571) 272-3644. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


SCOTT BADERMAN
SUPERVISORY PATENT EXAMINER